

Molecular and Cellular Biochemistry:

An International Journal for Chemical Biology in Health and Disease

CONTENTS VOLUME 176, Nos. 1 & 2, November 1997

THE CELLULAR BASIS OF CARDIOVASCULAR FUNCTION IN HEALTH AND DISEASE

P.K. Singal, V. Panagia and G.N. Pierce, guest editors

Dedication	1
Preface	2
Part I: Vascular changes in health and disease	
H.C. Champion, D.L. Akers, J.A. Santiago, D.G. Lambert, D.B. McNamara and P.J. Kadowitz: Analysis of responses to human synthetic adrenomedullin and calcitonin gene-related peptides in the hindlimb vascular bed of the cat	5-11
D.L. Akers, D.J. Lefer, I. Li Chen, R.G. Wilkens, J. Rice, H. Aurora, T.A. Osgood, B. Bedi, A.N. Tenaglia, A.J. Buda, P.J. Kadowitz and D.B. McNamara: Effect of short-term treatment with a monoclonal antibody to P-selectin on balloon catheter-induced: Intimal hyperplasia, re-endothelialization, and attenuation of endothelial-dependent relaxation	13-20
M.B. Anand-Srivastava, A. Palaparti and J. Pion: Differential regulation of G-protein expression by vasoactive peptides	21-27
A.B. Elmoselhi and A.K. Grover: Endothelin contraction in pig coronary artery: Receptor types and Ca^{2+} -mobilization	29-33
I.T. Mak, B.F. Dickens, A.M. Komarov, T.L. Wagner, T.M. Phillips and W.B. Weglicki: Activation of the neutrophil and loss of plasma glutathione during Mg-deficiency - modulation by nitric oxide synthase inhibition	35-39
N.L. Stephens and H. Jiang: Velocity of translation of single actin filaments (AF) by myosin heads from antigen-sensitized airway smooth muscle	41-46
A.K. Srivastava and J. St-Louis: Smooth muscle contractility and protein tyrosine phosphorylation	47-51
L. Saward and P. Zahradka: Coronary artery smooth muscle in culture: migration of heterogeneous cell populations from vessel wall	53-59
H.S. Buttar: An overview of the influence of ACE inhibitors on fetal-placental circulation and perinatal development	61-71
Part II: Cardiac mechanisms in health	
P.V. Sulakhe, X.T. Vo and R.R. Mainra: Differential nature of cross-talk among three G-coupled receptors regulating adenylyl cyclase in rat cardiomyocytes chronically exposed to receptor agonists	75-82
L.D. Fraker, J. Van Eyk and R.J. Solaro: Reversal of phosphate induced decreases in force by the benzimidazole pyridazinone, UD-CG 212 CL, in myofilaments from human ventricle	83-88
F. Sheikh, Y. Jin, K.B.S. Pasumarthi, E. Kardami and P.A. Cattini: Expression of fibroblast growth factor receptor-1 in rat heart H9c2 myoblasts increases cell proliferation	89-97
H. Wang, W. Yang and L. Fliegel: Identification of an HMG-like protein involved in regulation of Na^{+}/H^{+} exchanger expression	99-106
J. Slezák, W. Schulze, L. Okruhlicová, N. Tribulová and P.W. Singal: Cytochemical and immunochemical localization of Na,K-ATPase α subunit isoenzymes in the rat heart	107-112
A. Džurba, A. Ziegelhöffer, N. Vrbjar, J. Styk and J. Slezák: Estradiol modulates the sodium pump in the heart sarcolemma	113-118
A. Kaasik, A. Minajeva, K. Paju, M. Eimre and E.K. Seppet: Thyroid hormones differentially affect sarcoplasmic reticulum function in rat atria and ventricles	119-126
J. Singh, B.I. Hustler, J.J. Waring and F.C. Howarth: Dietary and physiological studies to investigate the relationship between calcium and magnesium signalling in the mammalian myocardium	127-134
R.V.S. Raju, R. Kakkar, J.M. Radhi and R.K. Sharma: Biological significance of phosphorylation and myristoylation in the regulation of cardiac muscle proteins	135-143
H.E. Morgan and C.J. Beilich: Contributions of increased efficiency and capacity of protein synthesis to rapid cardiac growth	145-151
L. Liu, J. Dai, R.R. Fandrich and E. Kardami: Cell-cycle dependent anti-FGF-2 staining of chicken cardiac myocytes: Movement from chromosomal to cleavage furrow- and midbody-associated sites	153-161
J.C. Khatter, M. Agbanyo, D. Bose and R.J. Hoeschen: An endogenous positive inotropic factor (EPiF) from porcine heart: Its effects on sarcoplasmic reticular (SR) Ca^{2+} metabolism	163-168
Part III: Subcellular changes in cardiomyopathies and heart failure	
K.M. Zimmer and M. Karmazyn: Prostaglandins attenuate cardiac contractile dysfunction produced by free radical generation but not by hydrogen peroxide	171-178
Y. Nasa, Y. Sakamoto, A. Sanbe, H. Sasaki, F. Yamaguchi and S. Takeo: Changes in fatty acid compositions of myocardial lipids in rats with heart failure following myocardial infarction	179-189
A. Ziegelhöffer, T. Ravingerová, J. Styk, J. Šeboková, I. Waczulíková, A. Breier, A. Džurba, K. Volkovová, J. Čársky and L. Turecký: Mechanisms that may be involved in calcium tolerance of the diabetic heart	191-198

G. Bkaily, A. Sculptoreanu, D. Jacques and G. Jasmin: Increases of T-type Ca^{2+} current in heart cells of the cardiomyopathic hamster	199-204
P.M. Toleikis and C.W. Tomlinson: Myocardial functional preservation during ischemia: Influence of beta blocking agents	205-210
K. Bezstarosti, L.K. Soei, P.D. Verdouw and J.M.J. Lamers: Phosphorylation by protein kinase C and the responsiveness of Mg^{2+} -ATPase to Ca^{2+} of myofibrils isolated from stunned and non-stunned porcine myocardium	211-218
S.W. Schaffer, C. Ballard and M.S. Mozaffari: Is there a link between impaired glucose metabolism and protein kinase C activity in the diabetic heart?	219-225
J. Ye, L. Yang, R. Sethi, J. Copps, B. Ramjiawan, R. Summers and R. Deslauriers: A new technique of coronary artery ligation: Experimental myocardial infarction in rats <i>in vivo</i> with reduced mortality	227-233
N. Iliskovic, V. Panagia, J. Slezák, D. Kumar, T. Li and P.K. Singal: Adriamycin depresses <i>in vivo</i> and <i>in vitro</i> phosphatidylethanolamine N-Methylation in rat heart sarcolemma	235-240
G.D. Arthur and A.N. Belcastro: A calcium stimulated cysteine protease involved in isoproterenol induced cardiac hypertrophy	241-248
D. Jacques, G. Bkaily, G. Jasmin, D. Ménard and L. Proschek: Early fetal like slow Na^{+} current in heart cells of cardiomyopathic hamster	249-256
J.C. Docherty, L. Yang, G.N. Pierce and R. Deslauriers: Na^{+} - H^{+} exchange inhibition at reperfusion is cardioprotective during myocardial ischemia-reperfusion; ^{31}P NMR studies	257-264
C.M. Bloor, L. Nimmo, M.D. McKirnan, Y. Zhang and F.C. White: Increased gene expression of plasminogen activators and inhibitors in left ventricular hypertrophy	265-271
M. Gupta and M.P. Gupta: Cardiac hypertrophy: Old concepts, new perspectives	273-279
C.E. Heyliger, A.L. Scarim, V.P. Eymer, K.A. Skau and D.M. Powell: Characteristics of the myocardial PM-FABP: Effect of diabetes mellitus	281-286
N. Takeda: Cardiomyopathies and mitochondrial DNA mutations	287-290
R. Kapoor, J. Kalra and K. Prasad: Cardiac depression and cellular injury in hemorrhagic shock and reinfusion: Role of free radicals	291-301
J.S. Juggi, F. Al-Awadi, S. Joseph, G. Telahoun and A. Prahash: Ischemic preconditioning is not additive to preservation with hypothermia or crystalloid cardioplegia in the globally ischemic rat heart	303-313
Part IV: Cellular biochemistry in non-cardiovascular tissues	
M.S. Nijjar and R.L. Belgrave: Regulation of Ca^{2+} homeostasis by glucose metabolism in rat brain	317-326
M.P. Czubyrt, J.C. Russel, J. Sarantopoulos, J.S.C. Gilchrist and G.N. Pierce: Age- and sex-related differences in nuclear lipid content and nucleoside triphosphatase activity in the JCR:LA- <i>cp</i> corpulent rat	327-335
M. Gupta, K. Dobashi, E.L. Greene, J.K. Orak and I. Singh: Studies on hepatic injury and antioxidant enzyme activities in rat subcellular organelles following <i>in vivo</i> ischemia and reperfusion	337-347
Index to Volume 176	349-353

